

CLAIMS

1. A processing unit for an electronic instrument comprising:

5 a signal/data processor;

an exposed external electrical contact for receiving electric power input;

an exposed external electrical contact for receiving an electric signal input;

10 an exposed external electrical contact for transmitting an electrical signal output; and

a housing comprising mechanical retention features for securely attaching a battery/input/output module.

15 2. The processing unit of Claim 1, wherein said processing unit comprises a memory.

3. The processing unit of Claim 1, wherein said processing unit comprises a keypad.

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4. The processing unit of Claim 1, wherein said processing unit comprises a microprocessor.

5. The processing unit of Claim 1, wherein the contacts may be sealed through the attachment of a cover to the surface of said housing.

5 6. The processing unit of Claim 1, wherein said processing unit comprises a display.

7. The processing unit of Claim 6, wherein said display is a touch panel display.

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8. A battery/input/output module for an electronic instrument comprising:

a storage device for electric energy;
an exposed external electrical contact for transmitting
15 electric power;
an exposed external electrical contact for receiving an electric signal input;
an exposed external electrical contact for transmitting an electrical signal output;
20 a housing comprising mechanical retention features for securely attaching a processing unit.

9. The battery/input/output module of Claim 8, wherein
the contacts may be sealed through the attachment of a cover
to the surface of said housing.

5 10. The battery/input/output module of Claim 8, further
comprising a serial port electrically coupled to said exposed
electrical contact for transmitting an electrical signal
output.

10 11. The battery/input/output module of Claim 8, further
comprising a parallel port electrically coupled to said
exposed electrical contact for transmitting an electrical
signal output.

15 12. The battery/input/output module of Claim 8, further
comprising a wireless transceiver for data communications
electrically coupled to said exposed electrical contact for
transmitting an electrical signal output.

20 13. The battery/input/output module of Claim 8, further
comprising an embedded inductive charger for said energy
storage device.

14. The battery/input/output module of Claim 8, further comprising a power input port for charging said energy storage device.

5 15. A portable electronic instrument comprising a processing unit coupled to a battery/input/output module.

16. The portable electronic instrument of Claim 15, wherein said portable electronic instrument is sealed.

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17. The portable electronic instrument of Claim 15, wherein said portable electronic instrument may be powered by coupling an external power source to said battery/input/output module.

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18. The portable electronic instrument of Claim 17, wherein said external power source may be inductively coupled to said battery/input/output module.

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19. The portable electronic instrument of Claim 15, wherein said portable electronic instrument is a handheld computer.

20. The portable electronic instrument of Claim 15,
wherein said portable electronic instrument comprises a
global positioning system (GPS).